a1 cont'd

wherein:

X = a non-steroidal anti-inflammatory drug (NSAID),

L = a covalent bond, a linker, or a spacer,

Z = a sulfur-containing functional group containing a substituted or unsubstituted hydrocarbyl moiety, wherein the sulfur-containing functional group is sulfoxide, sulfonate, reverse sulfonate, sulfonamide, reverse sulfonamide, sulfone, sulfinate, or reverse sulfinate.

a2

3. A compound according to claim 2 wherein said NSAID is diclofenac, naproxen, aspirin, ibuprofen, flurbiprofen, indomethacin, ketoprofen, or carprofen.

a3

5. A compound according to claim 1 wherein the sulfur-containing functional group is sulfonate or reverse sulfonate.

6. A compound according to claim 5 wherein the sulfur-containing functional group is a substituted or unsubstituted aromatic sulfonate.

a4

8. A compound according to claim 5 wherein the sulfur-containing functional group is a substituted or unsubstituted C1 to C10 alkyl sulfonate.

a5

10. A compound according to claim 1 wherein the sulfur-containing functional group is a sulfone.

11. A compound according to claim 10 wherein the sulfur-containing functional group is a substituted or unsubstituted C1 to C10 alkyl sulfone.

a6

13. A compound according to claim 10 wherein the sulfur-containing functional group is a substituted or unsubstituted aromatic sulfone.

a7

15. A compound according to claim 1 wherein the sulfur-containing functional group is a sulfonamide or reverse sulfonamide.

16. A compound according to claim 15 wherein the sulfur-containing functional group is a substituted or unsubstituted C1 to C10 alkyl sulfonamide.

a8

18. A compound according to claim 15 wherein the sulfur-containing functional group is a substituted or unsubstituted aromatic sulfonamide.

a9

20. A compound according to claim 1 wherein the sulfur-containing functional group is a sulfinate or reverse sulfinate.

21. A compound according to claim 1 wherein L has the structure:

-W-R-

wherein:

R is present or absent, and when present is alkylene, substituted alkylene, cycloalkylene, substituted cycloalkylene, heterocyclic, substituted heterocyclic, oxyalkylene, substituted oxyalkylene, alkenylene, substituted alkenylene, arylene, substituted arylene, alkarylene, substituted alkarylene, aralkylene or substituted aralkylene, and

W is ester, reverse ester, thioester, reverse thioester, amide, reverse amide, phosphate, phosphonate, imine or enamine.

a10

25. In a method for the administration of a non-steroidal anti-inflammatory drug (NSAID) to a subject for the treatment of a pathological condition, the improvement comprising directly or indirectly covalently attaching said NSAID to a sulfur-containing functional group containing a substituted or unsubstituted hydrocarbyl moiety prior to administration thereof to said subject.

A

a11

27. In the treatment of a subject suffering from a pathological condition by administration thereto of a non-steroidal anti-inflammatory drug (NSAID), the improvement comprising covalently attaching said NSAID to a sulfur-containing functional group containing a substituted or unsubstituted hydrocarbyl moiety prior to administration thereof to said subject.

28. A method for the treatment of a subject afflicted with a pathological condition, said method comprising administering to said subject an effective amount of a non-steroidal anti-inflammatory drug (NSAID),

wherein said NSAID is effective for treatment of said condition, and

wherein said NSAID has been modified by the direct or indirect covalent attachment thereto of a sulfur-containing functional group containing a substituted or unsubstituted hydrocarbyl moiety.

29. A method for the preparation of a protected form of a non-steroidal anti-inflammatory drug (NSAID), said method comprising directly or indirectly covalently attaching a sulfur-containing functional group containing a substituted or unsubstituted hydrocarbyl moiety to said NSAID.

a12

31. A method for reducing the side effects induced by administration of a non-steroidal anti-inflammatory drug (NSAID) to a subject, said method comprising directly or indirectly covalently attaching a sulfur-containing functional group containing a substituted or unsubstituted hydrocarbyl moiety to said NSAID prior to administration to said subject.

32. A method for enhancing the effectiveness of a non-steroidal anti-inflammatory drug (NSAID), said method comprising directly or indirectly covalently attaching a sulfur-containing functional group containing a substituted or unsubstituted hydrocarbyl moiety to said NSAID.

A

a13

~~34~~ 4. (New) A compound according to claim 1 wherein the sulfur-containing functional group is sulfoxide.

50

A